

- (d) determining one or more phenotypic or biochemical changes in said plant host;
- (e) [identifying a trait associated with said one or more phenotypic or biochemical changes;
- (f) ]identifying said recombinant viral nucleic acid that results in said one or more changes in said plant host;
- [(g)] ~~(f)~~ repeating steps (b)–(f) until [at least one nucleic acid associated with said trait is identified, whereby] a positive sense functional gene profile of said plant host or said donor organism is compiled.

Cancel Claims 46-57.

58. (Amended) The method according to Claim 45 [or 46], further comprising a step of identifying a donor gene associated with said [trait] changes.

59. (Amended) The method according to Claim 45 [or 46], further comprising a step of identifying a host plant gene associated with said [trait] changes.

60. (Reiterated) The method according to Claim 45, wherein said plant host is *Nicotiana*.

61. (Amended) The method according to Claim [49] 60, wherein said plant host is *Nicotiana benthamina* or *Nicotiana cleavlandii*.

62. (Reiterated) The method according to Claim 45, wherein a positive sense RNA is produced in the cytoplasm of said plant host, and said positive sense RNAs results in a reduced or enhanced expression of an endogenous gene in said plant host.

63. (Reiterated) The method according to Claim 45, wherein a positive sense RNA is produced in the cytoplasm of said host plant, and said positive sense RNA results in overexpression of a protein in said host plant.

64. (Reiterated) The method according to Claim 45, wherein said recombinant viral nucleic acid further comprises a native plant viral subgenomic promoter and a plant viral coat protein coding sequence.

65. (Amended) The method according to Claim [53] 64, wherein said recombinant viral nucleic acid further comprises a non-native plant viral subgenomic promoter, said native plant viral subgenomic promoter initiates transcription of said plant viral coat protein sequence and said non-native plant viral subgenomic promoter initiates transcription of said nucleic acid sequence.

66. (Reiterated) The method according to Claim 45, wherein said recombinant viral nucleic acids are obtained from a plant virus.

67. (Amended) The method according to Claim [55] 66, wherein said plant virus is a single-stranded plus sense RNA virus.

68. (Amended) The method according to Claim [56] 67, wherein said plant virus is selected from the group consisting of a potyvirus, a tobamovirus, and a bromovirus..

69. (Amended) The method according to Claim [57] 68, wherein said tobamovirus is a tobacco mosaic virus.

70. (Amended) The method according to Claim [57] 68, wherein said potyvirus is a rice necrosis virus.

### **REMARKS**

#### **The Amendments**

Claim 45 is amended to overcome the rejection.

Claims 46-57 are cancelled. Claims 46-56 are duplicates of Claims 58-70. Claim 57 is cancelled to overcome the rejection.

Applicants reserve the right to submit both cancelled or amended claims in one or more continuation applications.